

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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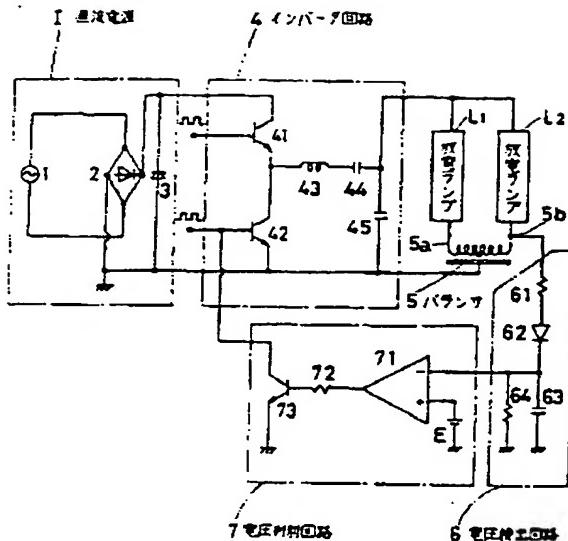
APPLICATION DATE : 27-07-87  
 APPLICATION NUMBER : 62187909

APPLICANT : MATSUSHITA ELECTRIC WORKS LTD;

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TITLE : DISCHARGE LAMP LIGHTING DEVICE



**ABSTRACT :** PURPOSE: To reliably detect a no-load state by setting the threshold voltage to the voltage between the output voltage of a voltage detecting circuit when multiple discharge lamps are all normal and the zero voltage.

CONSTITUTION: The threshold voltage E of a voltage judging circuit 7 is set to  $0 < E < E_1$ , where  $E_1$  is the voltage value across the smoothing capacitor 63 of a voltage detecting circuit 6 when both discharge lamps  $L_1, L_2$  are normal. The voltage of at least one terminal of the winding of a balancer 5 in reference to the middle point of the winding of the balancer 5 of this discharge lamp device is the preset value when both lamps  $L_1, L_2$  are normal and becomes entirely zero in a no-load state that both discharge lamps  $L_1, L_2$  are removed. When one lamp is removed or one lamp is in the half-wave discharge state, the voltage of at least one terminal of the winding of the balancer 5 becomes higher than the normal value. If the threshold voltage E is set to the voltage between the output voltage of the circuit 6 when both lamps  $L_1, L_2$  are normal and the zero voltage, the no-load state is reliably detected.

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